

REMARKS

Claims 1-39 are pending in this application. Claims 1-39 stand rejected. By this Amendment, claims 1, 7-14, 26, 32, and 34-36 have been amended. The amendments made to the claims do not alter the scope of these claims, nor have these amendments been made to define over the prior art. Rather, the amendments to the claims have been made to more clearly recite the invention. In light of the amendments and remarks set forth below, Applicant respectfully submits that each of the pending claims is in immediate condition for allowance.

The Examiner rejected claims 9-14 under 35 U.S.C. §112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In accordance with the Examiner's remarks, and to more clearly define the invention, Applicant has amended claims 9-14. As a result, Applicant requests that the Examiner withdraw the rejection under 35 U.S.C. § 112.

Claims 1, 24, and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,504,832 ("Koo"). Applicant respectfully traverses this rejection.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or combine references to arrive at the claimed subject matter. The prior art references must also teach or suggest all the limitations of the claim in question. See, M.P.E.P.

§ 706.02(j). A reference can only be used for what it clearly discloses or suggests. See, In re Hummer, 113 U.S.P.Q. 66 (C.C.P.A. 1957); In re Stencel, 4 U.S.P.Q.2d 1071, 1073 (Fed. Cir. 1987). Here, the references, whether taken individually or in combination, do not disclose or suggest the invention claimed by the Applicant.

Koo explicitly describes channel priority in the description. See col. 10, ln. 33, et seq. Koo allocates a priority to a channel (transmission signal), not to a code but. In Koo, when a walsh code fully exists, the walsh code will be used, and when a shortage of the walsh code occurs, quasi orthogonal codes will be used.

In Koo priority is given as a code to a walsh code rather than a quasi orthogonal code. However, according to the pending claims, not only is a priority assigned to a combined code, but determined each time, based on a channel quality value or a transmission quality required amount which is supplied from a mobile station for every transmission signal.

Thus, mitigation of inequality of call reception quality or suppression of deterioration by interference is achieved. Therefore, the express limitations recited in claim 1 can not be distilled from the disclosure in Koo and claim 1 is allowable over Koo. Further, all of the claims which depend either directly or indirectly from claim 1 are also allowable.

Claims 2-23 and 26-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Koo in view of U.S. Patent No. 6,421,335 (“Kilkki”). Applicant respectfully traverses this rejection.

As discussed above, Koo does not disclose assigning a priority to anything other than a walsh code and there would be no reason to modify Koo. To reject the remaining claims, the Office Action includes Kilkki. However, Kilkki fails to cure the deficiency in Koo discussed above.

A priority in Kilkki is priority of a transmission signal (packet) or a transmission path channel, and is different from Applicant's priority of the combined code for diffusing the transmission signal.

By combining Kilkki and Koo, it is possible to measure a channel quality after allocating a spread code by a mobile station, and to determine a priority based on measured channel quality. However, since this priority is determined from the result of the signal transmission based on the allocated spread code, the signal transmission to a mobile station from a base station is needed in advance for the determination of a priority.

On the other hand, by measuring quality from the result of the past signal transmission, a priority can be decided in advance based on the measured quality. However, since the use condition of a spread code code differs from the condition at the time of quality measurement by a time difference when allocating the same spread code as the next, the past priority is not necessarily effective at this time.

Accordingly, although the channel quality value (or a transmission quality required amount) from a mobile station needs to be informed, a priority of a combined code is determined in advance of signal transmission each time based on

that information, and assignment of a combined code is executed. One skilled in the art would not arrive at the abovementioned feature of this invention from the combination of Kilkki and Koo.

Claims 1 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable Applicant's admitted prior art ("AAPA") in view of U.S. Patent No. 6,389,138 ("Lie") in further view of U.S. Patent No. 6,580,703 ("Okubo"). Applicant respectfully traverses this rejection.

The Office Action indicates that the configuration method of a combined code is disclosed in Lie, and the technique for dissolving the shortage of a spread code using a plurality of scramble codes is indicated in AAPA. Okubo is then included for its disclosure of allocating a code so as that the interaction between codes may be reduced. However, the method disclosed in Okubo is unlike that in the present claims.

In particular, Okubo selects everyone candidate of the code which should be allocated, calculates the interaction between codes directly, and finally chooses the code to which an interaction is settled in a threshold. In the method disclosed by Okubo, since it is necessary to calculate the interaction between codes to all the combination between the codes already allocated, and to choose the code allocated while changing a code candidate repeatedly, when an interaction is not settled in a threshold, code assignment is very complicated.

The present invention determines the priority of code selection based on a channel quality value (or a transmission quality required amount), so as that the interaction between the codes after assignment may be reduced, without calculating the interaction between codes directly, and allocates a combined code based on the determined priority. As mentioned above, the method according to this invention differs from that of all references clearly. Therefore, this invention is not suggested at all from the combination of Okubo, Lie, and AAPA.

Applicant has responded to all of the rejections and objections recited in the Office Action. Reconsideration and a Notice of Allowance for all of the pending claims are therefore respectfully requested.

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In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

If the Examiner believes an interview would be of assistance, the Examiner is welcome to contact the undersigned at the number listed below.

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Respectfully submitted,

By 

Ian R. Blum

Registration No.: 42,336

DICKSTEIN SHAPIRO MORIN &
OSHINSKY LLP

1177 Avenue of the Americas

New York, New York 10036-2714

(212) 835-1400

Attorneys for Applicant

IRB/mgs
Attachments